

## Objective

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As an MSc Data Science graduate with a strong mathematical background, I am eager to apply my expertise in machine learning, predictive modeling, and data visualization to solve complex problems and extract meaningful insights. Proficient in Python, SQL, and data analysis tools like Tableau and PowerBI, I am dedicated to driving data-driven decision-making and contributing to innovative projects that enhance business strategies. My passion for data, combined with a commitment to excellence, positions me to thrive in a dynamic, collaborative environment.

## Profile Summary

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- Proficient in machine learning techniques such as classification analysis, K-means clustering, regression analysis, and decision trees, with a strong focus on predictive modeling and statistical analysis.
- Advanced skills in Python, SQL, and R, coupled with experience using data visualization tools like Tableau and PowerBI to create interactive dashboards and derive actionable insights.
- Successfully executed data analysis projects, including video game sales analysis, obesity level estimation, and greenhouse gas emissions study, demonstrating the ability to apply data science principles to real-world problems.
- Strong academic background with an MSc in Data Science from the University of Salford and a BSc in Mathematics, underscoring a solid quantitative foundation and analytical mindset.
- Excellent communication skills for presenting complex technical concepts to diverse audiences, with a proven ability to work effectively in interdisciplinary teams.

## Education

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<b>MSc DATA SCIENCE</b> University of Salford, Manchester	January 2022-May 2023
<b>BSc MATHEMATICS</b> Kannur University – India	June 2018- April 2021

## Certifications

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**IBM DATA ANALYST PROFESSIONAL CERTIFICATE**

## Skills

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- **Programming:** Python, SQL, R
- **Machine Learning:** Classification Analysis, K-means Clustering, Regression Analysis, Decision Tree
- **Tools:** SQL Server Management Studio, Databricks
- **Environments:** Jupyter Notebook, Visual Studio Code, Anaconda, Google Collab
- **Reporting & Visualisation Tools:** PowerBI, Tableau
- **Version Control:** Git, GitHub

- **Cloud:** AWS
- **Data Analysis:** Data transformation, Data cleaning, Exploratory Data Analysis, Data Visualization, Predictive Model Creation, Statistical Analysis, Feature selection, Model Evaluation

## Academic Project

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### PREDICTING CARDIOVASCULAR DISEASE BY USING MACHINE LEARNING

- **Developed Predictive Models for Cardiovascular Disease:** Built and evaluated machine learning models, including Decision Trees, k-Nearest Neighbors (KNN), and Artificial Neural Networks (ANN), to predict cardiovascular disease using the Cleveland heart disease dataset.
- **Enhanced Model Accuracy through Feature Selection:** Implemented feature selection techniques to improve model performance, achieving up to 85% accuracy with the KNN classifier and demonstrating significant enhancements in prediction reliability.
- **Conducted Comprehensive Data Preprocessing:** Performed extensive data cleaning and preprocessing, addressing missing values, outliers, and class imbalance to ensure high-quality input for machine learning models.
- **Utilized Advanced Tools and Libraries:** Leveraged Jupyter Notebook and Google Colaboratory for data analysis and model development, utilizing libraries such as TensorFlow and Scikit-learn for building and training machine learning models.
- **Analyzed and Compared Model Performance:** Evaluated and compared the effectiveness of different machine learning algorithms and feature selection methods, providing insights into the most effective approaches for predicting cardiovascular disease.

## Projects

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**Video Game Sales Analysis (Tableau):** Designed an interactive Tableau dashboard to visualize and analyze video game sales trends for titles with over 100,000 copies sold, providing actionable insights into industry performance metrics.

**Obesity Levels Estimation:** Developed a regression model to predict obesity by analyzing the impact of eating habits and physical activity on obesity likelihood using a comprehensive dataset.

**Greenhouse Gas Emissions Analysis (PowerBI):** Created a PowerBI dashboard to analyze greenhouse gas emissions from 15 countries over a decade, identifying key trends and patterns impacting climate change.

**Coffee Sales Analysis:** Conducted a detailed analysis of coffee sales data in Excel, focusing on average sales, country-wise trends, top customers, and market trajectory to refine business strategies

**Tools and Techniques:** Tableau, PowerBI, Python, Jupyter Notebook, Linear Regression, Excel, Pivot Tables